

Natural Resources Conservation Service

Arizona Basin Outlook Report April 1, 2021



Issued by

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Basin Outlook Reports And Federal – State – Private Cooperative Snow Surveys

How forecasts are made

Most of the annual streamflow in Arizona originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snow courses and automated Snow Telemetry (SNOTEL) sites, along with precipitation and streamflow values, are used in statistical and simulation models to prepare runoff forecasts. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service (NRCS) the National Weather Service, and the Salt River Project.

Forecasts of any kind are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertainty of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known. This is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or are concerned about having an adequate water supply, they may want to base their decisions on the 90% or 70% exceedance probability forecasts. On the other hand, if users anticipate receiving too much water, or are concerned about the threat of flooding, they may want to base their decisions on the 30% or 10% exceedance probability forecasts. Regardless of the forecast value users choose, they should be prepared to deal with either more or less water.



For more water supply and resource management information, contact:

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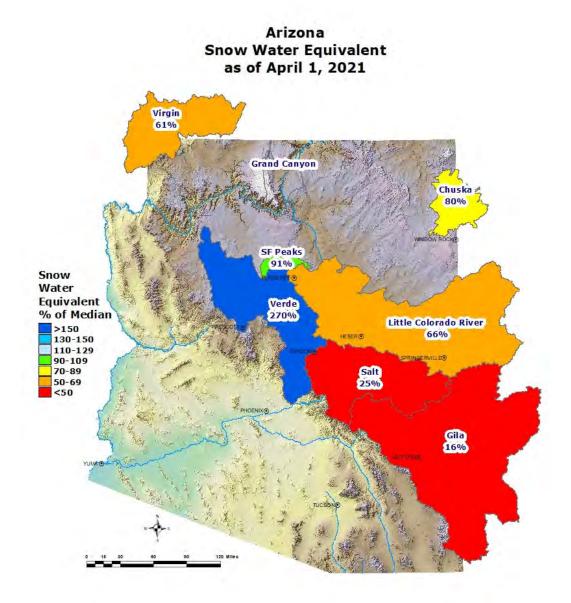
ARIZONA Basin Outlook Report as of April 1, 2021

SUMMARY

As of April 1, snowpack levels are well below normal to well above normal throughout the major basins of the state. Precipitation for the month of March was well below normal to normal in the major river basins. The Salt and Verde River reservoir system stands at 76 percent of capacity, while San Carlos Reservoir is at 0 percent of capacity. The forecast calls for well below normal runoff in the major basins for the spring runoff period.

SNOWPACK

Snow water equivalent levels in the state's major river basins are well below normal to well above normal, ranging from 16 percent of median in the Gila River Basin to 270 percent of median in the Verde River Basin. The statewide snowpack is below normal at 71 percent of median.

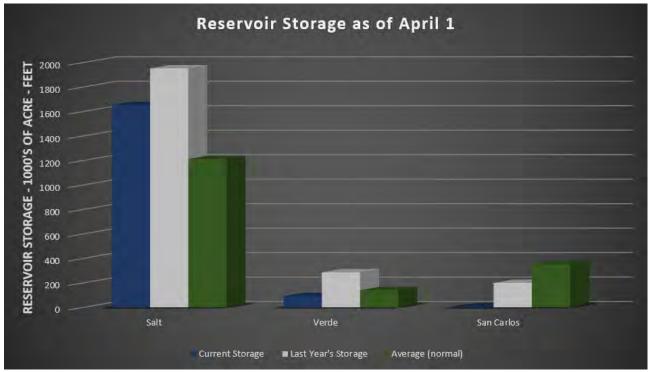


PRECIPITATION

Mountain data from NRCS SNOTEL sites and NWS Cooperator gages show that precipitation for March was well below average to average in the major river basins, although cumulative precipitation since October 1 remains well below normal throughout the state. Please refer to the precipitation bar graphs found in this report for more information on precipitation levels in the basins.

RESERVOIR STORAGE

As of April 1, the Salt and Verde River reservoir system stands at 76 percent of capacity. San Carlos Reservoir is currently at 0 percent of capacity.



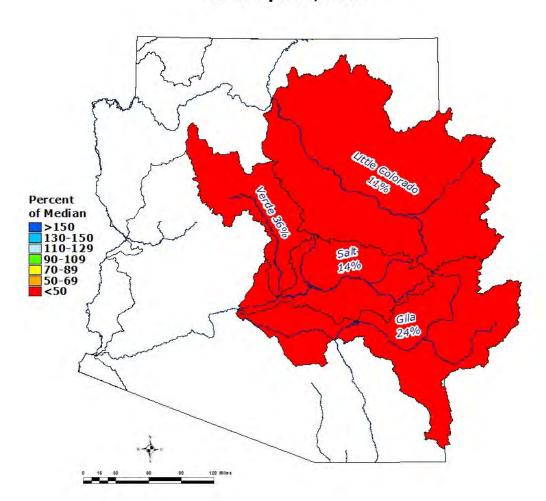
Key storage volumes displayed in thousands of acre-feet (x1000):

<u>Reservoir</u>	Current <u>Storage</u>	Last Year <u>Storage</u>	30-Year <u>Average</u>	Storage <u>Capacity</u>
Salt River System	1653.7	1952.2	1181.0	2025.8
Verde River System	92.2	286.6	135.7	287.4
San Carlos Reservoir	3.6	199.7	324.9	875.0
Lyman Lake	7.2	15.1	11.8	30.0
Lake Havasu	568.8	546.9	562.7	619.0
Lake Mohave	1689.0	1708.1	1602.0	1810.0
Lake Mead	10388.0	11602.0	20297.0	26159.0
Lake Powell	8843.8	11812.0	17745.0	24322.0

STREAMFLOW

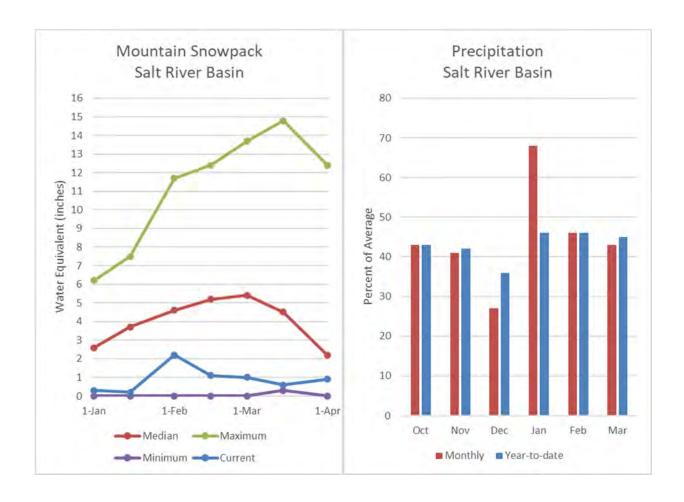
As of April 1, the forecast calls for well below normal streamflow for the spring runoff period, ranging from 11 percent of median in the Little Colorado River above Lyman Lake to 36 percent of median in the Verde River above Horseshoe Dam. Total precipitation since the beginning of the water year has been well below average for the state, resulting in dry soils and less than ideal conditions for runoff this spring. Please refer to the basin forecast tables found in this report for more information regarding water supply forecasts.

Arizona Spring Streamflow Forecasts as of April 1, 2021



SALT RIVER BASIN as of April 1, 2021

Well below normal streamflow levels are forecast for the basin. In the Salt River, near Roosevelt, the forecast calls for 14% of median streamflow through May, while at Tonto Creek, the forecast calls for 14% of median streamflow through May. Snow survey measurements show the Salt snowpack to be at 25% of median.



Salt
Streamflow Forecasts - April 1, 2021

		Forecast Exceedance Probabilities for Risk Assessment Chance that actual volume will exceed forecast					nt	
Salt	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Salt R nr Roosevelt ³								
	APR			10	13%			80
	APR-MAY	6.5	12.4	18	14%	25	39	127
Tonto Ck ab Gun Ck nr Roosevelt3								
	APR			0.6	14%			4.4
	APR-MAY	0.05	0.35	8.0	14%	1.54	3.3	5.9

^{1) 90%} and 10% exceedance probabilities are actually 95% and 5%

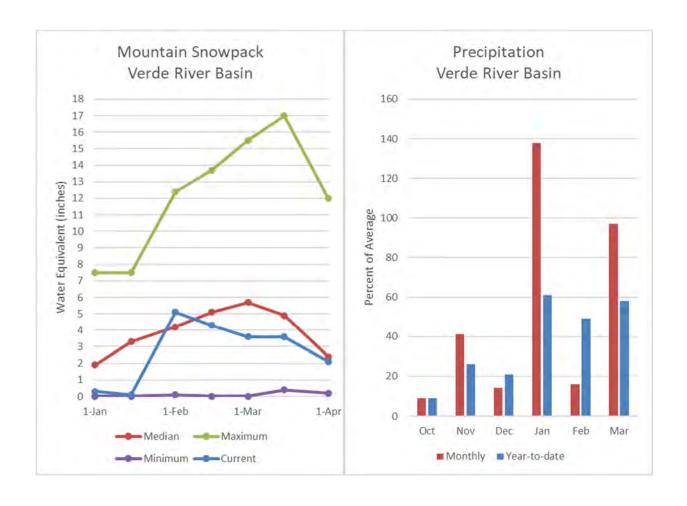
³⁾ Median value used in place of average

Reservoir Storage End of March, 2021	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Salt River Reservoir System	1653.7	1952.2	1378.0	2025.8
Basin-wide Total	1653.7	1952.2	1378.0	2025.8
# of reservoirs	1	1	1	1
Watershed Snowpack Analysis April 1, 2021	# of Sites	% Median	Last Year % Median	
Salt	10	25%	28%	

²⁾ Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

VERDE RIVER BASIN as of April 1, 2021

Well below normal streamflow levels are forecast for the basin. In the Verde River above Horseshoe Dam, the forecast calls for 36% of median streamflow through May. Snow survey measurements show the Verde snowpack to be at 270% of median.



Verde Streamflow Forecasts - April 1, 2021 Forecast Exceedance Probabilities for Risk Assessment

		Chance that actual volume will exceed forecast						
Verde	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Verde R bl Tangle Ck ab Horseshoe Dam ³								
	APR			9	38%			24
	APR-MAY	3	7.8	13	36%	20	35	36

^{1) 90%} and 10% exceedance probabilities are actually 95% and 5%

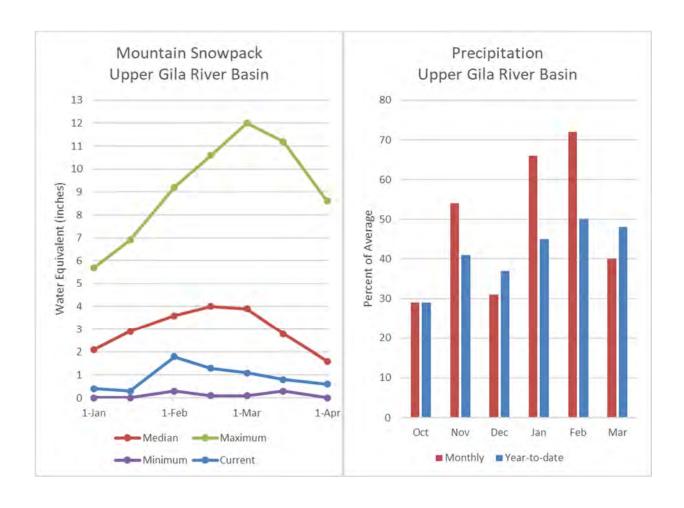
³⁾ Median value used in place of average

Reservoir Storage End of March, 2021	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Verde River Reservoir System	92.2	286.6	203.6	287.4
Basin-wide Total	92.2	286.6	203.6	287.4
# of reservoirs	1	1	1	1
Watershed Snowpack Analysis April 1, 2021	# of Sites	% Median	Last Year % Median	
Verde	6	270%	60%	

²⁾ Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

SAN FRANCISCO-UPPER GILA RIVER BASIN as of April 1, 2021

Well below normal streamflow levels are forecast for the basin. In the San Francisco River, at Clifton, the forecast calls for 25% of median streamflow levels through May. In the Gila River, near Solomon, the forecast calls for 24% of median streamflow levels through May. At San Carlos Reservoir, inflow to the lake is forecast at 13% of median through May. Snow survey measurements show the snowpack for this basin to be at 16% of median.



San Francisco-Upper Gila Streamflow Forecasts - April 1, 2021

San Francisco-Upper Gila		F	sk Assessme ed forecast					
	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Gila R at Gila ³								
	APR-MAY	2.7	4.5	6	36%	7.8	11.2	16.5
Gila R bl Blue Ck nr Virden ³								
	APR-MAY	0.74	3.4	6.3	30%	10.1	17.3	21
San Francisco R at Glenwood ³								
	APR-MAY	0.51	1.24	2	27%	3	5.1	7.3
San Francisco R at Clifton ³								
	APR-MAY	0.39	2.3	4.4	25%	7.3	12.7	17.3
Gila R nr Solomon ³								
	APR			6	24%			25
	APR-MAY	0.9	4.9	9.4	24%	15.4	27	39
San Carlos Reservoir Inflow ³								
	APR-MAY	0	0.19	2.3	13%	8.8	24	18.4

^{1) 90%} and 10% exceedance probabilities are actually 95% and 5%

³⁾ Median value used in place of average

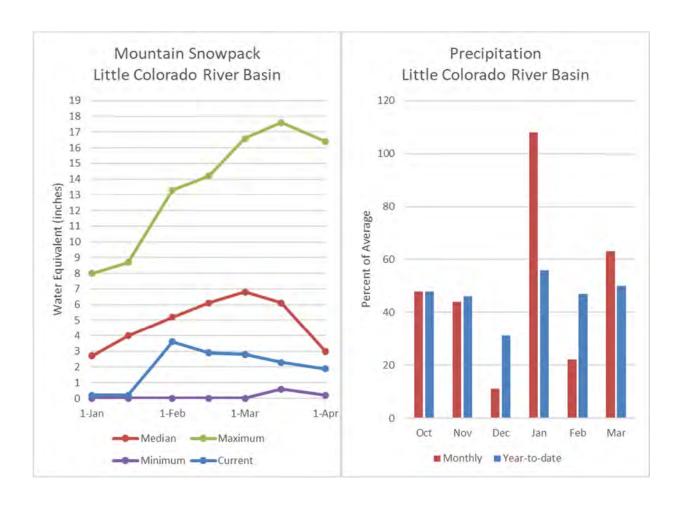
Reservoir Storage End of March, 2021	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
San Carlos Reservoir	3.6	199.7	413.8	875.0
Basin-wide Total	3.6	199.7	413.8	875.0
# of reservoirs	1	1	1	1

Watershed Snowpack Analysis April 1, 2021	# of Sites	% Median	Last Year % Median
San Francisco-Upper Gila	7	16%	27%

²⁾ Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

LITTLE COLORADO RIVER BASIN as of April 1, 2021

Well below normal streamflow levels are forecast for the basin. In the Little Colorado River, above Lyman Lake, the forecast calls for 11% of median streamflow through June. At Blue Ridge (C.C. Cragin) Reservoir, inflow to the lake is forecast at 22% of median through May. Snowpacks along the southern headwaters of the Little Colorado River, and along the central Mogollon Rim, were measured at 66% and 38% of median, respectively.



Little Colorado

Streamflow Forecasts - April 1, 2021

Forecast Exceedance Probabilities for Risk Assessment
Chance that actual volume will exceed forecast

	L	Chance that actual volume will exceed forecast						
Little Colorado	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Little Colorado R ab Lyman Lake ³								
	APR-JUN	0.04	0.19	0.4	11%	0.71	1.42	3.5
Rio Nutria nr Ramah ³								
	APR-MAY	0	0	0.04	21%	0.13	0.42	0.19
Zuni R ab Black Rock Reservoir ³								
	APR-MAY	0	0	0.02	20%	0.27	1.16	0.1
Blue Ridge Reservoir Inflow ³								
	APR-MAY	0.07	0.4	0.9	22%	1.69	3.5	4.1
Lake Mary Reservoir Inflow ³								
	APR-MAY	0.06	0.18	0.3	30%	0.47	0.83	11

^{1) 90%} and 10% exceedance probabilities are actually 95% and 5%

³⁾ Median value used in place of average

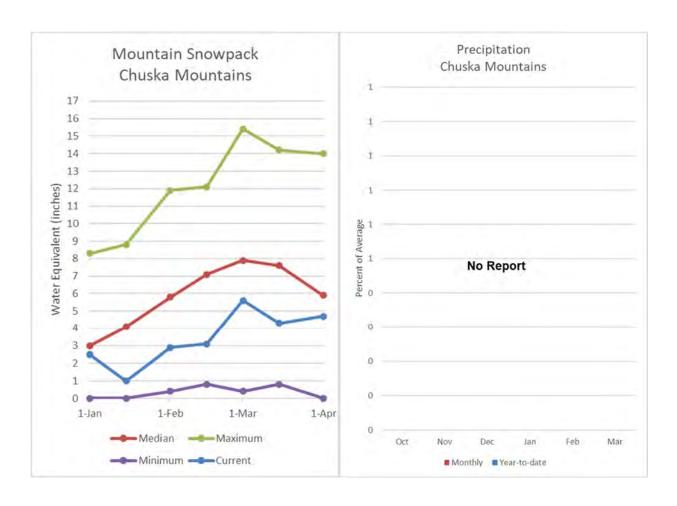
Reservoir Storage End of March, 2021	Current (KAF)	Last Year (KAF)	Average (KAF)	Capacity (KAF)
Lyman Reservoir	7.2	15.0	14.7	30.0
Basin-wide Total	7.2	15.0	14.7	30.0
# of reservoirs	1	1	1	1

Watershed Snowpack Analysis April 1, 2021	# of Sites	% Median	Last Year % Median
Little Colorado	8	66%	80%
Central Mogollon Rim	3	38%	0%

²⁾ Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

CHUSKA MOUNTAINS as of April 1, 2021

Snow survey measurements conducted by staff of the Navajo Nation Water Management Branch show the Chuska snowpack to be at 80% of median. The forecast calls for well below normal runoff for Wheatfields Creek, Captain Tom Wash, and Bowl Canyon Creek.



Chuska-Defiance

Streamflow Forecasts - April 1, 2021

Forecast Exceedance Probabilities for Risk Assessment

Chuska-Defiance		Chance that actual volume will exceed forecast						
	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Captain Tom Wash nr Two Gray Hills								
	MAR-MAY	0.01	0.13	0.4	15%	0.89	2.2	2.6
Wheatfields Ck nr Wheatfields								
	MAR-MAY	0.14	0.33	0.5	24%	0.71	1.08	2.1
Bowl Canyon Ck ab Asaayi Lake								
	MAR-MAY	0.05	0.17	0.3	23%	0.45	0.74	1.3

^{1) 90%} and 10% exceedance probabilities are actually 95% and 5%

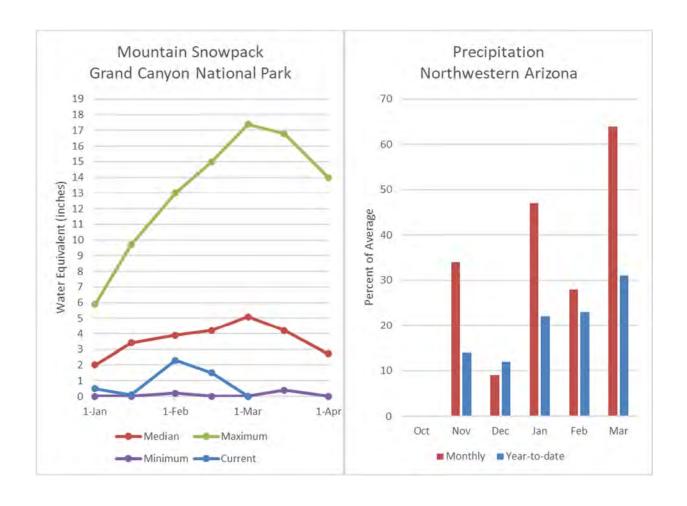
³⁾ Median value used in place of average

Watershed Snowpack Analysis April 1, 2021	# of Sites	% Median	Last Year % Median
Chuska-Defiance	0		
Chuska Mountains	0		
Defiance Plateau	0		

²⁾ Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

NORTHWESTERN ARIZONA as of April 1, 2021

On the Colorado River, well below normal inflow to Lake Powell is forecast at 45% of the 30-year average for the forecast period April-July. At the Grand Canyon, snow survey measurements were unable to be completed for the April 1st survey.



Grand Canyon

Streamflow Forecasts - April 1, 2021

		F			abilities for Ris		nt	
Grand Canyon	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Avg	30% (KAF)	10% (KAF)	30yr Avg (KAF)
Lake Powell Inflow ²								
	APR-JUL	1670	2520	3200	45%	3960	5220	7160

^{1) 90%} and 10% exceedance probabilities are actually 95% and 5%

³⁾ Median value used in place of average

Reservoir Storage	· ·		Average	Capacity	
End of March, 2021	(KAF)	(KAF)	(KAF)	(KAF)	
Lake Havasu	568.8	545.9	562.8	619.0	
Lake Mohave	1689.0	1708.0	1687.0	1810.0	
Lake Mead	10388.0	11610.0	20450.0	26159.0	
Lake Powell	8843.8	11817.9	16942.0	24322.0	
Basin-wide Total	21489.6	25681.8	39641.8	52910.0	
# of reservoirs	4	4	4	4	

Watershed Snowpack Analysis April 1, 2021	# of Sites	% Median	Last Year % Median
Grand Canyon	0		

²⁾ Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

Basinwide Summary: April 1, 2021 (Averages/Medians based on 1981-2010 reference period)

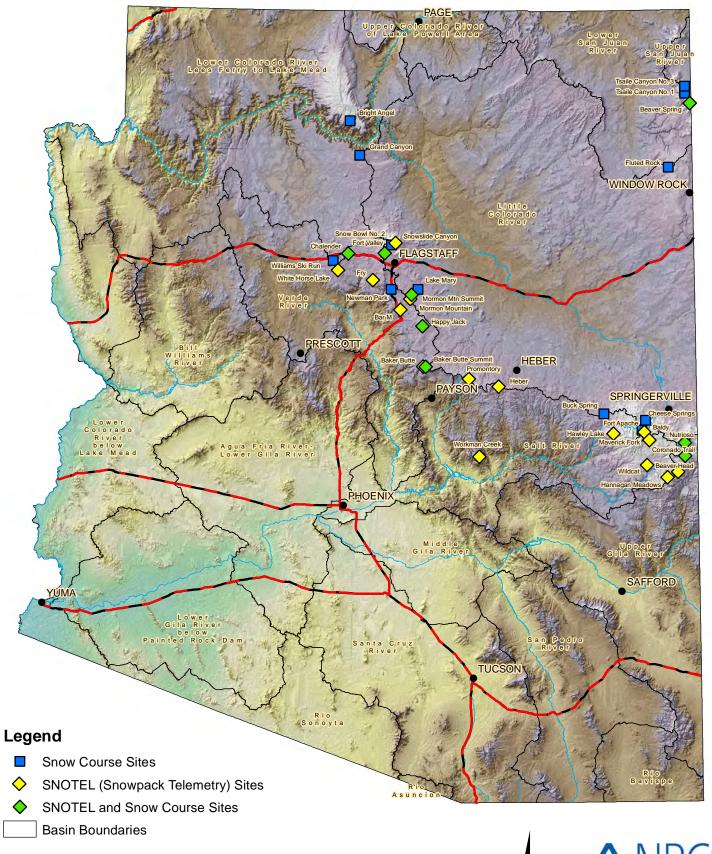
Snowpack Summary for April 1, 2021

, ,		Elevation	Denth	SWE	Median	%	Last Voar	Last Year
Salt	Network	(ft)	(in)	(in)	(in)		SWE (in)	% Median
Baldy	SNOTEL	9125	0	0.0	2.5		0.0	0%
Beaver Head	SNOTEL	7990	0	0.0	0.0	070	0.0	070
Buck Spring	SC	7400	9	2.9	0.0		0.0	
Coronado Trail	SC	8350	10	3.1	0.0		0.0	
Coronado Trail	SNOTEL	8400	0	0.0	0.0		0.0	
Fort Apache	SC	9160	·	0.0	6.2		0.0	
Hannagan Meadows	SNOTEL	9020	5	0.2	7.7	3%	1.8	23%
Hawley Lake	SNOTEL	8300	18	7.1			7.7	
Heber	SNOTEL	7640	0	0.0	0.0		0.0	
Maverick Fork	SNOTEL	9200	0	0.0	5.3	0%	4.0	75%
Promontory	SNOTEL	7930		2.1	5.5	38%	0.0	0%
Wildcat	SNOTEL	7850		0.0	0.0		0.0	
Workman Creek	SNOTEL	6900	0	0.0	0.0		0.0	
Basin Index						25%		28%
# of sites						10		10
		Clayestic.	Daniel	CVA/E	Modia	0/	Look Vee	Look Vaar
Verde	Network	Elevation (ft)	Deptn (in)	(in)	Median (in)	% Median	Last Year SWE (in)	Last Year % Median
Baker Butte	SNOTEL	7300	0	0.0			0.0	
Baker Butte No. 2	SC	7700	23	8.8	8.9	99%	0.0	
Baker Butte Smt	SNOTEL	7700	37	11.7		0070	12.6	
Bar M	SNOTEL	6393	0	0.0			0.0	
Chalender	SNOTEL	7100	0	0.0			0.0	
Chalender	SC	7100			0.0			
Fort Valley	SNOTEL	7350	0	0.0			0.0	
Fort Valley	SC	7350	_		0.0			
Fry	SNOTEL	7200	0	0.0	0.0		0.6	
Happy Jack	SC	7630	0	0.0	0.0		0.0	
Happy Jack	SNOTEL	7630	7	2.7	0.3	900%	0.0	0%
Mormon Mountain	SNOTEL	7500	0	0.0		0%	0.0	0%
Mormon Mountain Summit #2	SC	8470	17	6.3		62%		
Mormon Mtn Summit	SNOTEL	8500	19	7.0			7.4	
Newman Park	SC	6750	0	0.0	0.0			
Snow Bowl #2	SC	11200	58	12.8	19.2	67%		
White Horse Lake	SNOTEL	7180	0	0.0	0.0		0.0	
Williams Ski Run	SC	7720			6.5			
Basin Index						270%		60%
# of sites						6		6
		Elevation	Denth	S/\/⊏	Median	%	Last Vear	Last Year
San Francisco Peaks	Network	(ft)	(in)	(in)	(in)	Median		
Snow Bowl #2	SC	11200	58	12.8	19.2	67%		
Snowslide Canyon	SNOTEL	9730	42	15.5	17.0	91%	20.9	123%
Basin Index						91%		123%
# of sites						1		1
Can Eranaiana Unnas Cila	Notwork	Elevation	Depth	SWE	Median	%	Last Year	Last Year
San Francisco-Upper Gila	Network	(ft)	(in)	(in)	(in)	Median	SWE (in)	% Median

Beaver Head	SNOTEL	7990	0	0.0			0.0	
Coronado Trail	SC	8350	10	3.1	0.0			
Coronado Trail	SNOTEL	8400	0	0.0	0.0		0.0	
Frisco Divide	SNOTEL	8000	0	0.0			0.0	
Hannagan Meadows	SNOTEL	9020	5	0.2	7.7	3%	1.8	23%
Lookout Mountain	SNOTEL	8500	0	0.0	0.0		0.0	
Nutrioso	SC	8500			0.0			
Nutrioso	SNOTEL	8500	0	0.0			0.0	
Signal Peak	SNOTEL	8360	1	0.0	0.0		0.0	
Silver Creek Divide	SNOTEL	9000	5	2.2	7.0	31%	2.2	31%
State Line	SC	8000			0.0			
Basin Index						16%		27%
# of sites						7		7
Little Colorado	Network	Elevation (ft)	Depth (in)	SWE (in)	Median (in)	% Median	Last Year SWE (in)	Last Year % Median
Baker Butte	SNOTEL	7300	0	0.0	0.0		0.0	
Baker Butte No. 2	SC	7700	23	8.8	8.9	99%		
Baker Butte Smt	SNOTEL	7700	37	11.7			12.6	
Baldy	SNOTEL	9125	0	0.0	2.5	0%	0.0	0%
Boon	SC	8140	4	1.0	0.8	125%		
Buck Spring	SC	7400	9	2.9	0.0		0.0	
Cheese Springs	SC	8700	5	1.0	1.6	63%		
Dan Valley	SC	7640	3	0.4	0.1	400%		
Fort Apache	SC	9160			6.2			
Fort Valley	SNOTEL	7350	0	0.0			0.0	
Fort Valley	SC	7350			0.0			
Heber	SNOTEL	7640	0	0.0			0.0	
Lake Mary	SC	6930	0	0.0				
Maverick Fork	SNOTEL	9200	0	0.0		0%	4.0	75%
Mcgaffey	SC	8120	2	0.2				
Mormon Mountain	SNOTEL	7500	0	0.0		0%	0.0	0%
Mormon Mountain Summit #2	SC	8470	17	6.3		62%		
Mormon Mtn Summit	SNOTEL	8500	19	7.0			7.4	
Nutrioso	SC	8500			0.0			
Nutrioso	SNOTEL	8500	0	0.0			0.0	
Promontory	SNOTEL	7930	· ·	2.1	5.5	38%	0.0	0%
Snow Bowl #2	SC	11200	58	12.8	19.2		0.0	3,0
Snowslide Canyon	SNOTEL	9730	42	15.5		91%	20.9	123%
Basin Index						66%		80%
# of sites						8		8
Central Mogollon Rim	Network	Elevation	Depth		Median	%		Last Year
	INCLINUIN	(ft)	(in)	(in)	(in)	Median	SWE (in)	% Median
Baker Butte	SNOTEL	7300	0	0.0	0.0		0.0	
Baker Butte No. 2	SC	7700	23	8.8	8.9	99%		
Baker Butte Smt	SNOTEL	7700	37	11.7			12.6	
Heber	SNOTEL	7640	0	0.0	0.0		0.0	
Promontory	SNOTEL	7930		2.1	5.5	38%	0.0	0%
Basin Index						38%		0%
# of sites						3		3
Chucka Defiance	Network	Elevation	Depth	SWE	Median	%	Last Year	Last Year
Chuska-Defiance	INCIMOIN	(ft)	(in)	(in)	(in)	Median	SWE (in)	% Median
			_		***			

Beaver Spring	SC	9220	12	2.3	8.0	29%		
Beaver Spring	SNOTEL	9200	16	4.9			5.5	
Bowl Canyon	SC	8980	23	5.8	7.8	74%		
Fluted Rock	SC	7800	0	0.0	0.0			
Hidden Valley	SC	8480	10	3.8				
Missionary Spring	SC	7940	0	0.0	0.0			
Navajo Whiskey Ck	SNOTEL	9050	16				0.0	
Tsaile Canyon #1	SC	8160	9	3.0	3.4	88%		
Tsaile Canyon #3	SC	8920	26	8.4	7.2	117%		
Whiskey Creek	SC	9050	36	8.6	8.7	99%		
Basin Index								
# of sites						0		0
			5 4	014/5		0.4		
Chuska Mountains	Network	Elevation (ft)	Depth (in)	(in)	Median (in)	% Median		Last Year % Median
Beaver Spring	SC	9220	12	2.3	8.0	29%		
Beaver Spring	SNOTEL	9200	16	4.9			5.5	
Bowl Canyon	SC	8980	23	5.8	7.8	74%		
Hidden Valley	SC	8480	10	3.8				
Missionary Spring	SC	7940	0	0.0	0.0			
Navajo Whiskey Ck	SNOTEL	9050	16				0.0	
Tsaile Canyon #1	SC	8160	9	3.0	3.4	88%		
Tsaile Canyon #3	SC	8920	26	8.4	7.2	117%		
Whiskey Creek	SC	9050	36	8.6	8.7	99%		
Basin Index								
# of sites						0		0
Defiance Plateau	Network	Elevation (ft)	Depth (in)	SWE (in)	Median (in)	% Median		Last Year % Median
Defiance Plateau Fluted Rock	Network SC		•					
		(ft)	(in)	(in)	(in)			
Fluted Rock		(ft)	(in)	(in)	(in)		SWE (in)	
Fluted Rock Basin Index		(ft)	(in)	(in)	(in)	Median	SWE (in)	% Median
Fluted Rock Basin Index		(ft) 7800 Elevation	(in) 0	(in) 0.0 SWE	(in) 0.0 Median	Median 0	SWE (in)	% Median
Fluted Rock Basin Index # of sites Grand Canyon	SC Network	(ft) 7800 Elevation (ft)	(in) 0	(in) 0.0	(in) 0.0 Median (in)	Median 0	SWE (in)	% Median 0 Last Year
Fluted Rock Basin Index # of sites Grand Canyon Bright Angel	SC Network SC	(ft) 7800 Elevation (ft) 8400	(in) 0 Depth (in)	(in) 0.0 SWE (in)	(in) 0.0 Median (in) 5.3	Median 0	SWE (in)	% Median 0 Last Year
Fluted Rock Basin Index # of sites Grand Canyon Bright Angel Grand Canyon	SC Network	(ft) 7800 Elevation (ft)	(in) 0	(in) 0.0 SWE	(in) 0.0 Median (in)	Median 0	SWE (in)	% Median 0 Last Year
Fluted Rock Basin Index # of sites Grand Canyon Bright Angel	SC Network SC	(ft) 7800 Elevation (ft) 8400	(in) 0 Depth (in)	(in) 0.0 SWE (in)	(in) 0.0 Median (in) 5.3	Median 0	SWE (in) Last Year SWE (in)	% Median 0 Last Year
Fluted Rock Basin Index # of sites Grand Canyon Bright Angel Grand Canyon Basin Index	SC Network SC	(ft) 7800 Elevation (ft) 8400	(in) 0 Depth (in)	(in) 0.0 SWE (in)	(in) 0.0 Median (in) 5.3	Median 0 % Median	SWE (in) Last Year SWE (in)	% Median 0 Last Year % Median
Fluted Rock Basin Index # of sites Grand Canyon Bright Angel Grand Canyon Basin Index	SC Network SC	(ft) 7800 Elevation (ft) 8400 7500 Elevation	Depth (in)	(in) 0.0 SWE (in) 0.0	(in) 0.0 Median (in) 5.3	Median 0 % Median	Last Year SWE (in)	% Median 0 Last Year % Median
Fluted Rock Basin Index # of sites Grand Canyon Bright Angel Grand Canyon Basin Index # of sites Virgin	SC Network SC SC Network	(ft) 7800 Elevation (ft) 8400 7500 Elevation (ft)	Depth (in) Depth (in)	SWE (in) SWE (in)	Median (in) Median (in) Median (in)	Median 0 % Median 0 Median	Last Year SWE (in)	% Median 0 Last Year % Median 0 Last Year % Median
Basin Index # of sites Grand Canyon Bright Angel Grand Canyon Basin Index # of sites Virgin Gardner Peak	SC Network SC SC Network SNOTEL	(ft) 7800 Elevation (ft) 8400 7500 Elevation (ft) 8322	Depth (in) Depth (in) Depth (in)	(in) 0.0 SWE (in) 0.0 SWE (in) 7.0	(in) 0.0 Median (in) 5.3 0.0 Median (in) 10.7	Median 0 % Median 0 Median 65%	Last Year SWE (in) Last Year SWE (in)	% Median 0 Last Year % Median 0 Last Year % Median 147%
Fluted Rock Basin Index # of sites Grand Canyon Bright Angel Grand Canyon Basin Index # of sites Virgin Gardner Peak Gutz Peak	SC Network SC SC Network SNOTEL SNOTEL	(ft) 7800 Elevation (ft) 8400 7500 Elevation (ft) 8322 6763	Depth (in) Depth (in) Depth (in) 19 1	(in) 0.0 SWE (in) 0.0 SWE (in) 7.0 0.4	(in) 0.0 Median (in) 5.3 0.0 Median (in) 10.7 5.2	Median 0 % Median 0 Median 65% 8%	Last Year SWE (in) Last Year SWE (in) 15.7 7.6	% Median 0 Last Year % Median 0 Last Year % Median 147% 146%
Fluted Rock Basin Index # of sites Grand Canyon Bright Angel Grand Canyon Basin Index # of sites Virgin Gardner Peak Gutz Peak Harris Flat	SC Network SC SC Network SNOTEL SNOTEL SNOTEL	(ft) 7800 Elevation (ft) 8400 7500 Elevation (ft) 8322 6763 7792	(in) 0 Depth (in) 0 Depth (in) 19 1 0	(in) 0.0 SWE (in) 0.0 SWE (in) 7.0 0.4 0.0	(in) 0.0 Median (in) 5.3 0.0 Median (in) 10.7 5.2 2.7	Median 0 % Median 0 % Median 65% 8% 0%	Last Year SWE (in) Last Year SWE (in) 15.7 7.6 8.2	% Median 0 Last Year % Median 0 Last Year % Median 147% 146% 304%
Fluted Rock Basin Index # of sites Grand Canyon Bright Angel Grand Canyon Basin Index # of sites Virgin Gardner Peak Gutz Peak Harris Flat Kolob	SC Network SC SC Network SNOTEL SNOTEL SNOTEL SNOTEL	(ft) 7800 Elevation (ft) 8400 7500 Elevation (ft) 8322 6763 7792 9263	(in) 0 Depth (in) 0 Depth (in) 19 1 0 39	(in) 0.0 SWE (in) 0.0 SWE (in) 7.0 0.4 0.0 13.1	(in) 0.0 Median (in) 5.3 0.0 Median (in) 10.7 5.2 2.7 20.0	Median 0 % Median 0 Median 65% 8%	Last Year SWE (in) Last Year SWE (in) 15.7 7.6 8.2 26.2	% Median 0 Last Year % Median 0 Last Year % Median 147% 146% 304% 131%
Fluted Rock Basin Index # of sites Grand Canyon Bright Angel Grand Canyon Basin Index # of sites Virgin Gardner Peak Gutz Peak Harris Flat Kolob Little Grassy	SC Network SC SC Network SNOTEL SNOTEL SNOTEL SNOTEL SNOTEL SNOTEL	(ft) 7800 Elevation (ft) 8400 7500 Elevation (ft) 8322 6763 7792 9263 6065	Depth (in) Depth (in) 19 1 0 39 0	SWE (in) 0.0 SWE (in) 7.0 0.4 0.0 13.1 0.0	(in) 0.0 Median (in) 5.3 0.0 Median (in) 10.7 5.2 2.7 20.0 0.0	% Median 0 % Median 65% 8% 0% 66%	Last Year SWE (in) Last Year SWE (in) 15.7 7.6 8.2 26.2 0.0	% Median 0 Last Year % Median 0 Last Year % Median 147% 146% 304% 131%
Fluted Rock Basin Index # of sites Grand Canyon Bright Angel Grand Canyon Basin Index # of sites Virgin Gardner Peak Gutz Peak Harris Flat Kolob Little Grassy Long Flat	Network SC SC SC Network SNOTEL SNOTEL SNOTEL SNOTEL SNOTEL SNOTEL SNOTEL	(ft) 7800 Elevation (ft) 8400 7500 Elevation (ft) 8322 6763 7792 9263 6065 7982	(in) Depth (in) 0 Depth (in) 19 1 0 39 0 7	SWE (in) 0.0 SWE (in) 7.0 0.4 0.0 13.1 0.0 2.3	(in) 0.0 Median (in) 5.3 0.0 Median (in) 10.7 5.2 2.7 20.0 0.0 3.9	Median 0 % Median 0 % Median 65% 8% 0%	Last Year SWE (in) Last Year SWE (in) 15.7 7.6 8.2 26.2 0.0 6.8	% Median 0 Last Year % Median 0 Last Year % Median 147% 146% 304% 131% 174%
Fluted Rock Basin Index # of sites Grand Canyon Bright Angel Grand Canyon Basin Index # of sites Virgin Gardner Peak Gutz Peak Harris Flat Kolob Little Grassy Long Flat Long Valley Jct	SC Network SC SC Network SNOTEL SNOTEL SNOTEL SNOTEL SNOTEL SNOTEL SNOTEL SNOTEL SNOTEL	(ft) 7800 Elevation (ft) 8400 7500 Elevation (ft) 8322 6763 7792 9263 6065 7982 7465	(in) Depth (in) 0 Depth (in) 19 1 0 39 0 7 0	SWE (in) 0.0 SWE (in) 7.0 0.4 0.0 13.1 0.0 2.3 0.0	(in) 0.0 Median (in) 5.3 0.0 Median (in) 10.7 5.2 2.7 20.0 0.0 3.9 0.0	% Median 0 % Median 65% 8% 0% 66% 59%	Last Year SWE (in) Last Year SWE (in) 15.7 7.6 8.2 26.2 0.0 6.8 0.0	% Median 0 Last Year % Median 0 Last Year % Median 147% 146% 304% 131% 174%
Fluted Rock Basin Index # of sites Grand Canyon Bright Angel Grand Canyon Basin Index # of sites Virgin Gardner Peak Gutz Peak Harris Flat Kolob Little Grassy Long Flat Long Valley Jct Midway Valley	SC Network SC SC Network SNOTEL	(ft) 7800 Elevation (ft) 8400 7500 Elevation (ft) 8322 6763 7792 9263 6065 7982 7465 9827	(in) Depth (in) 0 Depth (in) 19 1 0 39 0 7 0 53	(in) 0.0 SWE (in) 0.0 7.0 0.4 0.0 13.1 0.0 2.3 0.0 15.1	(in) 0.0 Median (in) 5.3 0.0 Median (in) 10.7 5.2 2.7 20.0 0.0 3.9 0.0 22.6	% Median 0 % Median 65% 8% 0% 66% 59% 67%	Last Year SWE (in) Last Year SWE (in) 15.7 7.6 8.2 26.2 0.0 6.8 0.0 25.4	% Median 0 Last Year % Median 0 Last Year % Median 147% 146% 304% 131% 174% 112%
Fluted Rock Basin Index # of sites Grand Canyon Bright Angel Grand Canyon Basin Index # of sites Virgin Cardner Peak Gutz Peak Harris Flat Kolob Little Grassy Long Flat Long Valley Jct Midway Valley Webster Flat	SC Network SC SC Network SNOTEL SNOTEL SNOTEL SNOTEL SNOTEL SNOTEL SNOTEL SNOTEL SNOTEL	(ft) 7800 Elevation (ft) 8400 7500 Elevation (ft) 8322 6763 7792 9263 6065 7982 7465	(in) Depth (in) 0 Depth (in) 19 1 0 39 0 7 0	SWE (in) 0.0 SWE (in) 7.0 0.4 0.0 13.1 0.0 2.3 0.0	(in) 0.0 Median (in) 5.3 0.0 Median (in) 10.7 5.2 2.7 20.0 0.0 3.9 0.0 22.6	% Median 0 % Median 0 % Median 65% 8% 0% 66% 59% 67% 77%	Last Year SWE (in) Last Year SWE (in) 15.7 7.6 8.2 26.2 0.0 6.8 0.0 25.4 19.7	% Median 0 Last Year % Median 0 Last Year % Median 147% 146% 304% 131% 174% 112% 153%
Fluted Rock Basin Index # of sites Grand Canyon Bright Angel Grand Canyon Basin Index # of sites Virgin Gardner Peak Gutz Peak Harris Flat Kolob Little Grassy Long Flat Long Valley Jct Midway Valley	SC Network SC SC Network SNOTEL	(ft) 7800 Elevation (ft) 8400 7500 Elevation (ft) 8322 6763 7792 9263 6065 7982 7465 9827	(in) Depth (in) 0 Depth (in) 19 1 0 39 0 7 0 53	(in) 0.0 SWE (in) 0.0 7.0 0.4 0.0 13.1 0.0 2.3 0.0 15.1	(in) 0.0 Median (in) 5.3 0.0 Median (in) 10.7 5.2 2.7 20.0 0.0 3.9 0.0 22.6	% Median 0 % Median 65% 8% 0% 66% 59% 67%	Last Year SWE (in) Last Year SWE (in) 15.7 7.6 8.2 26.2 0.0 6.8 0.0 25.4 19.7	% Median 0 Last Year % Median 0 Last Year % Median 147% 146% 304% 131% 174% 112%

Arizona Snow Survey Data Sites



ONTITUDENatural Resources Conservation Service